

Monatshefte für **Mathematik**

herausgegeben von

H. G. Grigler, Wien, S. Großer, Wien,
J. Tejtmanek, Wien, E. Hlawka, Wien, N. Hofreiter, Wien,
R. Reiter, Wien, L. Schmetterer, Wien,
M. Schmidt, Boulder, Col., U.S.A., K. Sigmund, Wien

1. 94, 1982

0026-9255

Springer-Verlag
New York



Alle Rechte, einschließlich das der Übersetzung in fremde Sprachen und das der photomechanischen Wiedergabe oder einer sonstigen Vervielfältigung, auch in Mikroform, vorbehalten.

The exclusive copyright for all languages and countries, including the right for photomechanical and any other reproductions including microform is transferred to the publisher.

© 1982 by Springer-Verlag/Wien

Inhaltsverzeichnis

Afflerbach, L.: Minkowskische Reduktionsbedingungen für positiv definite quadratische Formen in 5 Variablen	1—8
Minkowski's Conditions for Reduced Positive Definite Quadratic Forms in 5 Variables	
Bank, S. B.: On Certain Properties of Solutions of Second-Order Linear Differential Equations	179—200
Blind, G. und R.: Die Anzahl der primitiven Polytope im $\mathbb{R}^d$ mit $2d - 2$ Facetten	267—280
The Number of Primitive Polytopes in $\mathbb{R}^d$ with $2d - 2$ Facets	
Bozapalides, S., Firarides, A.: Formal Translation Monoid and Algebra Congruences in a Monoidal Category	201—212
Brunner, N.: Dedekind-Endlichkeit und Wohlordenbarkeit	9—31
D -finite Sets and Wellordered Spaces	
Endres, R.: Multiplikatorsysteme der symplektischen Thetagruppe . .	281—297
Multiplier Systems of the Symplectic Theta Group	
Felix, R.: Zentrale Distributionen auf nilpotenten Liegruppen	91—101
Central Distributions on Nilpotent Lie Groups	
Firarides, A., s. Bozapalides, S.	
Gmira, A., Veron, L.: Asymptotic Behaviour of the Solution of a Semilinear Parabolic Equation	299—311
Helmberg, G.: Die Entropie einer linear gebrochenen Funktion . . .	213—248
Entropy of a Broken Linear Function	
Jirina, M.: Interpolation of Completely Monotone Functions	103—107
Keller, G.: Stochastic Stability in Some Chaotic Dynamical Systems .	313—333
Kriegel, A.: Die richtigen Räume für Analysis im Unendlich-Dimensionalen	109—124
The Convenient Infinite Dimensional Spaces for Analysis	
Leitmann, D.: Durchschnitte von Pjateckij—Shapiro-Folgen	33—44
Intersections of Pjateckij—Shapiro-Sequences	
Nakahara, T.: On Cyclic Biquadratic Fields Related to a Problem of Hasse	125—132
Narkiewicz, W., Rayner, F.: Distribution of Values of $\sigma_2(n)$ in Residue Classes	133—141
Nowak, W.-G.: Eine Ω -Abschätzung zu einem zweidimensionalen Gitterpunktproblem	143—147
An Ω -Estimate for a Two-Dimensional Lattice Point Problem	

Peart, P.: The Dispersion of the Hammersley Sequence in the Unit Square	249—261
Petrich, M., Reilly, N. R.: Bands of Groups with Universal Properties	45—67
Quek, T. S., Yap, L. Y. H.: Fourier Multipliers on Compact Groups	69—72
Rayner, F., s. Narkiewicz, W.	
Reilly, N. R., s. Petrich, M.	
Rudolph, R.: Ein Untergruppensatz für modulare Gruppen	149—153
A Subgroup Theorem for Modular Groups	
Sies, H.: Einige Eigenschaften monotoner Matrizen	155—162
Some Properties of Monotone Matrices	
Veech, W. A.: A Criterion for a Process to Be Prime	335—341
Veron, L., s. Gmira, A.	
Weil, W.: Zonoide und verwandte Klassen konvexer Körper	73—84
Zonoids and Related Classes of Convex Bodies	
Wong, S.: Law of the Iterated Logarithm for Transitive C^2 Anosov Flows and Semiflows over Maps of the Interval	163—173
Yap., L. Y. H., s. Quek, T. S.	

Listed in Current Contents

Instructions to Authors

- 1) Papers may be submitted in English, German or French.

Copyright

It is a fundamental condition that manuscripts submitted have not been published and will not be simultaneously submitted or published elsewhere. By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publisher if and when the article is accepted for publication. The copyright covers the exclusive rights to reproduce and distribute the article, including reprints, photographic reproductions, microform or any other reproductions of similar nature, and translations.

Photographic reproduction, microform, or any other reproduction of text, figures, or tables from this journal is prohibited without permission obtained from the publisher.

Special regulations for the USA. The Article-Fee Code on the first page of an article in this journal indicates the copyright owner's consent that in the USA copies may be made for personal or internal use, provided the stated fee for copying beyond that permitted by Section 107 or 108 of the United States Copyright Law is paid through the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, U.S.A.

If a code does not appear, copies of the article may be made without charge, provided permission is obtained from the publisher.

The copyright owner's consent does not extend to copying for general distribution, for promotion, for creating new works, or for resale. Specific written permission must be obtained from the publisher for such copying.

Manuscripts are to be sent to: "Monatshefte für Mathematik", Institut für Mathematik der Universität, Strudlhofgasse 4, A-1090 Wien, Austria. Authors should always retain a duplicate copy of the manuscript. The editors reserve the right to publish manuscripts in any order they think fit.

All business communications, and in particular all correspondence concerning offprints should not be addressed to the "Monatshefte", but should be sent directly to Springer-Verlag, Mülkerbastei 5, P. O. Box 367, A-1011 Wien, Austria.

- 2) Manuscripts should be typed on one side of the paper only in doubleline spacing with wide margins. Text pages should be numbered consecutively.

- 3) Each paper should be preceded by an English summary. Papers in German or French should in addition have a translation of the title into English.

- 4) Both form and content of the paper should be carefully checked to exclude the need for corrections in proof. A charge will be made for changes introduced after the manuscript has been set in type.

- 5) Formulae should be written so that no uncertainty can arise as to the meaning and position of signs and characters, even if the reader is not an expert. *Formulae should be typewritten* and special care taken that indices and exponents may be recognized as such even if they show no difference in size. Otherwise they are to be written in a smaller size by hand. Special type (Greek, Gothic, Script) must be indicated by underlining in colour. In order to avoid confusion, the underlining of *Greek characters in red, Gothic in blue and Script in green* is recommended. It is advisable to type Roman characters also for Gothic and Script and to distinguish them simply by underlining in colour. If, however, handwritten characters have been used, small and capital letters should be clearly distinguished by *underlining capital letters twice and small letters once*. This also applies to Roman characters written by hand such as $c, C; k, K; O, P; p, P; s, S; u, U; v, V; w, W; x, X; z, Z$. Special care should be taken to show the difference between e and l or u and n or n and r or o and 0 , wherever they appear simultaneously as mathematical symbols written by hand. The characters ν and ν as well as ϵ and ε are also liable to cause confusion when they appear together.

All letters contained in formulae, as well as single letters in the text are automatically composed in italics and therefore require no underlining. On the other hand *abbreviations in Roman type (the type normally used for the text) that appear in formulae*, must be specially marked (by *underlining in yellow*, if possible). *Bold type* should be specially marked by *underlining in brown*. Underlining of formulae and mathematical signs in ink or by means of a typewriter should be avoided as this would inevitable lead to inclusion of the underlining in the composition as part of the mathematical symbol. The fact that typewriters usually show no difference between the figur 0 (zero) and the letter O, nor, frequently, between 1 (one) and the letter l, leads to considerable confusion. Here it is absolutely essential that each letter and each numeral be individually distinguished. The numeral 1 should be written clearly as such (i. e. with a preceding hook) and not merely as a downward stroke. The latter is particularly disastrous where l appears as superscript. In manuscripts written in English, in which the small (Roman) letter *a* is employed as a mathematical symbol, care must be taken to avoid any confusion with the indefinite article.

If necessary, the manuscript should be accompanied by a separate sheet containing "Instructions for the compositor" explaining the meaning of marks and other symbols used.

6) Formulae which should be emphasized must be numbered on the *right-hand* side of the page in arabic numerals in parentheses.

7) Literature references should be listed at the end of the paper and numbered. For journal articles the following information should be provided: names and initials of all authors, full title, journal title abbreviated in accordance with international practice, volume number, first and last page numbers, and year of publication. Books are to be cited by listing the author(s), full title, edition, place of publication, publisher, and year. Citations in the text should be given by numbers in square brackets.

8) Footnotes which do not belong to the heading of the paper should be numbered consecutively.

9) All figures are to be numbered consecutively and should be submitted on separate sheets. Line drawings should be drawn with indian ink in clean, uniform lines. The labelling of all figures with letters, words, numerals should be done by the author. The maximum area available for the reproduction of a figure is 108×177 mm.

10) The running head (condensed title) should not exceed 67 letters, including spaces. If the title of the paper is very long the author is requested kindly to state an adequate condensation of it on the first page of the manuscript.

11) One hundred offprints of each paper are supplied free of charge. Additional offprints should be ordered by the author on returning the corrected proofs. Order form and price list for additional offprints will be sent enclosed with the proofs. Authors are requested kindly to return the corrected proofs as quickly as possible in order that delays in printing may be avoided. Page proofs will not be sent unless expressly requested, because of the delay in publication involved.